Applications are invited for the position of an

ALMA Back-end Integration and Data Communication Engineer

Career Path: V

Purpose and scope of the position: Within the European ALMA team, the selected candidate will take up responsibilities in the monitoring of production contracts and in the integration, commissioning and acceptance of the Back-end sub-system and related data communication infrastructures (fibre optic based system) of the ALMA radio telescope. As such, the selected candidate will be part of the ALMA Back-end Integrated Product Team (BE IPT). The position will involve duties in ALMA partner regions, Europe, North America and Chile in the form of frequent and occasionally extended missions.
Duties and responsibilities: The position will include several of the following tasks:
- Elaboration of BE integration & test plans and support for the development of an operations and maintenance plan in close collaboration with the System Engineering & Integration IPT.
- Definition of applicable Quality Management processes, mainly in the areas of production, integration and validation in the ALMA project.
- Participation in and organisation of product reviews.
- Monitoring of the installation, commissioning and acceptance of the BE sub-systems and fibre optic distribution infrastructures on site.
- Support for developing and maintaining the BE sub-system specifications and interfaces and for assuring that the sub-system designs comply with defined specifications.
- Monitoring of detailed sub-system performance of the BE sub-system technical budgets.
- Contribution to the ALMA configuration and change-control processes.
- Direct reporting to the ESO ALMA Back-end manager. Support the IPT manager in monitoring schedules and the technical performance of all back-end subsystems.

Professional requirements/qualifications: University degree (or equivalent) in Electrical Engineering or Physical Sciences. Further qualifications and experience in a scientific domain would be advantageous, e.g. a post-graduate experience in radio-astronomy research and/or in high speed fiber optic networks and advanced electronics industrial environment. At least three years of working experience in an engineering position on multidisciplinary, high technology, advanced electronics and fibre-optic data communication project(s).
Experience and knowledge: The ideal candidates will have experience in:
- Design, development, production installation and commissioning of advanced electronic systems, high speed optical data communication systems, optical components and related infrastructures.
- Establishing Assembly, Integration and Verification Plans communication and electronic systems.
- Configuration and Quality management.
- Excellent communication skills, a good command of the English language and a strong sense of team spirit are essential.

Duty station: Garching near Munich, Germany.
Starting date: As soon as possible.
Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits as well as financial help in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. The title or grade may be subject to change according to qualification and the number of years of experience.
Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV (in English) and the ESO Application Form (*http://www.eso.org/gen-fac/adm/pers/forms/*) by
15 April 2005.

For further information please contact Mrs Nathalie Kastelyn, Personnel Department, Tel. +49-89-3200-6217. You are also strongly encouraged to consult the ESO Home Page (*http://www.eso.org/*) for additional information about ESO.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is à priori excluded.

Applications are invited for the position of a

Senior Engineer – Head of Paranal Engineering Department

Career Path: V

Purpose and scope of the position: The role of the Paranal Engineering Department is to carry out the assembly, integration and troubleshooting of the VLT (Very Large Telescope), the instrumentation of the VLT and of the VLTI (VLT Interferometry), of the VST (VLT Survey Telescope), VISTA (Visible and Infrared Survey Telescope), of all the facilities required on the Observatory (Power Station, Air Compressors, Chillers, etc), and to provide general engineering support of maintenance, troubleshooting and fault repair to nightly operations.
The Engineering Department of the Paranal Observatory comprises 5 engineering groups (Mechanical, Electronic, Software, Optics, and Instrumentation), with a total workforce presently consisting of 45 engineers and 15 technicians.
The telescopes and instruments are large, complex systems that involve many advanced technologies and that require a high level of engineering support.
Duties and responsibilities: Reporting to the Head of Engineering of the La Silla-Paranal Observatory, the successful candidate shall have the responsibility of:
- The four telescopes with their instruments making them available for Science operations 365 nights per year;
- The integration activity of new instruments and telescopes ensuring they are properly performed on time;
- The engineering support to the commissioning of the interferometric complex;
- Additional technical responsibilities including that of the Power Station and of the auxiliary systems (compressed air, chillers, etc.);
- The definition of operational procedures and long-term planning;
- The personnel management (in particular training and performance evaluation) and supervision of the five engineering groups;
- The preparation of the annual budgets and the scheduling of support staff.

Professional requirements/qualifications:
- University Degree in mechanical, optomechanical or aeronautical engineering.
- At least ten years of relevant on field engineering experience in large multi-discipline scientific/of high technology projects;
- Technical experience in optomechanic systems will be a plus.

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